UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

ANDREW CORZO, SIA HENRY, ALEXANDER LEO-GUERRA, MICHAEL MAERLENDER, BRANDON PIYEVSKY, BENJAMIN SHUMATE, BRITTANY TATIANA WEAVER, and CAMERON WILLIAMS, individually and on behalf of all others similarly situated, Plaintiffs, v. BROWN UNIVERSITY, CALIFORNIA INSTITUTE OF TECHNOLOGY, UNIVERSITY OF CHICAGO, THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK, CORNELL UNIVERSITY, TRUSTEES OF DARTMOUTH COLLEGE, DUKE UNIVERSITY, EMORY UNIVERSITY, GEORGETOWN UNIVERSITY, THE JOHNS HOPKINS UNIVERSITY, MASSACHUSETTS INSTITUTE OF TECHNOLOGY, NORTHWESTERN UNIVERSITY, UNIVERSITY OF NOTRE DAME DU LAC, THE TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA, WILLIAM MARSH RICE UNIVERSITY, VANDERBILT UNIVERSITY, and YALE UNIVERSITY, Defendants.	Case No. 1:22-cv-00125 Judge Matthew F. Kennelly

**AMENDED REPLY IN SUPPORT OF DEFENDANTS' MOTION TO EXCLUDE
EXPERT TESTIMONY AND OPINIONS OF HAL SINGER, GEORGE BULMAN, AND
ELIZABETH MORA**

PUBLIC VERSION

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Elizabeth Mora	Plaintiffs' Expert
Hal Singer	Plaintiffs' Expert
Lauren Stiroh	Defendants' Expert
David Yermack	Defendants' Expert

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INTRODUCTION

Plaintiffs assert an overcharge but offer no reliable means of proving it, because students paid less after the challenged conduct—a set of best practices designed to increase financial aid—began. No methodology or magic regression can overcome that dispositive defect. To conclude otherwise, plaintiffs' primary expert Hal Singer abandons any pretense of principled work in favor of reaching pre-determined results. Indeed, the only way he even purports to show an overcharge is by inventing his own measure of "price," disregarding inconvenient data, and rigging his statistical analysis to ensure it finds common impact. So when plaintiffs urge the Court to "focus on the expert's 'principles and methodology,'" they have it exactly right. Opp. 5 n.5 (quoting *In re Testosterone Replacement Therapy Prods. Liab. Litig.*, 430 F. Supp. 3d 516, 523-33 (N.D. Ill. 2019) (Kennelly, J.)). Singer's principles and methodology are junk science and must be excluded.

Nothing in the opposition or Singer's new and untimely "declaration" is to the contrary. Plaintiffs mostly restate Singer's opinions next to caselaw finding that different regressions, involving none of the defects in Singer's, were admissible. But no one disputes regressions *can* be reliable. The problem is that Singer's work *here* is unreliable because it rests on faulty premises and produces unstable (and often absurd) results. First, "Effective Institutional Price" ("EIP") is an irrelevant, confusing, and made-up metric which excludes multiple sources of aid and does not reflect what students pay. Plaintiffs defend "EIP" by redefining it, but cannot dispute that ignoring aid necessarily manufacturers an "overcharge" where none exists. Second, his regression results vary wildly based on minor tweaks, requiring him to cherry-pick only data that suggests an overcharge while ignoring extensive available information. Plaintiffs suggest these are considerations for cross-examination, but needing to arbitrarily curate data to conjure injury proves the model's unreliability. Finally, his single average overcharge model *imposes* common impact,

rather than tests for it. Plaintiffs say Singer does more analysis too, but his "second steps"—like in-sample prediction analysis—do not even purport to show common impact by themselves and are not reliable. They again guarantee finding harm and generate facially implausible results.

Beyond that, plaintiffs continue their press tour (Opp. 2-3) but out-of-context emails or old statements from university employees cannot remedy working backward from the result counsel dictated. Nor does the existence of cases in which Singer's opinions were accepted (Opp. 1, 5-6) obviate the numerous courts that have rejected Singer's outcome-driven methods or the failings of the regressions he performed here. And Singer's new declaration—even setting aside that it must be stricken as untimely—reveals just how rigged his work is, because it inexplicably finds that even students who went to school for free were overcharged in the same amount as those who paid.

The Court should also exclude the testimony and opinions of plaintiffs' other experts. Plaintiffs cannot contest that Bulman's academic work contradicts his analysis here. Either Bulman's prior work is sound and his opinions are unreliable because they do not follow accepted methods, or his academic work is unsound, he is unqualified, and his report is still inadmissible. Mora's opinions are based on anecdotal observations at a non-defendant school that was not a member of the 568 Group; vague recollections of conversations decades ago; or one year of "operational data" that concededly does not include the information necessary to form her opinions. None of that suffices for reliable testimony. The Court should grant defendants' motion.

ARGUMENT

I.   Singer's Opinions Are Not A Reliable Application Of Accepted Economic Methodologies

      A.   All Analysis Involving "Effective Institutional Price" Should Be Excluded Because The Metric Is Made Up And Irrelevant

Singer's opinions find an overcharge by reference to "EIP," which Singer made up and students do not pay because it excludes numerous sources of aid. Mot. 5-6. That renders any

overcharge analysis based on it irrelevant. *Id.* Plaintiffs' responses are cursory and unavailing.

First, plaintiffs argue that "EIP *is* the net price the institution charges the student." Opp. 17. But even Singer says that is wrong. Ex. 1, Singer Am. Rep. ¶6; Ex. 2, Singer Tr. 288:10-22. An "overcharge" calculation that "reflects the change in the EIP due to the [challenged conduct]," Opp. 18, is thus irrelevant and manipulated; plaintiffs must show a difference "between the price paid and what the market or fair price would have been." *Hanover Shoe, Inc. v. United Shoe Mach. Corp.*, 392 U.S. 481, 489 (1968). Singer's decision to exclude from his regression students whose *total* gift aid exceeded 95% of cost of attendance—not just the institutional gift aid allegedly affected by the challenged conduct—only further undermines the metric's relevance.[1]

Second, plaintiffs assert that Singer's "EIP" calculations can show "how much more each student had to pay a Defendant due to the [challenged conduct] *holding third-party aid constant*." Opp. 18. That ignores the central defect with "EIP": "holding third-party aid constant" precludes measuring what students paid, which is the only metric relevant to proving an overcharge (and thus antitrust injury or damages). Singer also offers no basis for assuming that third-party aid *should* be held constant, as is necessary to defend the reliability of a regression using "EIP." And although plaintiffs say Singer ran regression variations to test the effect of some forms of third-party aid (Opp. 18), they do not (and cannot) assert that he evaluated all forms of additional aid.[2]

B.   Excluding Students Who Got The Most Aid Renders Singer's Analysis Unreliable And His New "Declaration" Only Confirms His Model Is Broken

Plaintiffs defend Singer's exclusion of students receiving more than 95% of the cost of

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[1] "Ex." refers to the exhibits to the Gringer Declaration and objections are omitted for deposition citations.

[2] Plaintiffs briefly dispute that Singer invented "EIP," citing a 30-year-old journal article. Opp. 18 n.33. This development must have been news to Singer, who testified that "EIP" "is a measure I came up with." Singer Tr. 282:18-283:8. Regardless, the referenced work uses a different metric, "real average price per student," which is not "EIP." *See* Ex. 3, Dennis Carlton et al., *Antitrust and Higher Education: Was There a Conspiracy to Restrict Financial Aid?*, 26 RAND J. ECON. 131, 135 n.17 (1995).

attendance in total aid from his analysis with circular reasoning and an improperly disclosed expert report. Plaintiffs even embrace the arbitrariness of this decision, defending as "sensibl[e]" a supposed focus on "students who were in the Class" and identifying *yet more students* whose data Singer omitted. Opp. 19. But more wrongs do not make a right.

Plaintiffs say Singer's arbitrary decisions are irrelevant because *defendants* have not shown that including these students would affect Singer's analysis. That gets things backward: "The proponent of the expert bears the burden of demonstrating that the expert's testimony would satisfy the *Daubert* standard." *Lewis v. CITGO Petroleum Corp.*, 561 F.3d 698, 705 (7th Cir. 2009). And for the reasons already explained (Mot. 6-9), plaintiffs have failed to do so. Available evidence (and common sense) required Singer to address the effect of full-ride students on his analysis for it to be reliable. He did not. Assumptions underlying his failure to consider such data, like students never receiving full rides for the first time after their first year of attendance, are demonstrably false. *Compare* Ex. 4, Hill Surreb. ¶44 & n.49 (nearly 200 Yale students received full rides when they did not in the preceding year), *with* Singer Tr. 211:19-212:17 (stating this "never happen[s]"). These real students are not, as plaintiffs claim, "a *hypothetical example*." Opp. 20 n.40.

Plaintiffs then asked Singer to try again, but the Court should strike the new declaration (ECF No. 785-2) as untimely. His analyses address criticisms defendants' expert made months ago. *See* Ex. 5, Hill Reb. ¶¶234-238. Indeed, when plaintiffs refused defendants' request to withdraw the Singer declaration, they acknowledged that the declaration responded to defendants' "repeated" arguments about Singer's cherry-picking of data. Ex. 6, Email from R. Cipolla (Feb. 24, 2025). Filing a late report with opinions that could have been offered earlier deprives defendants of a full opportunity to respond to the new analyses and opinions, and the prejudice to defendants cannot be cured without imposing undue costs or case delays. *See Viamedia, Inc. v.*

Comcast Corp., 2018 WL 11371105, at *4 (N.D. Ill. Mar. 27, 2018); *Finwall v. City of Chicago*, 239 F.R.D. 504, 507 (N.D. Ill. 2006). Accordingly, under Rule 37(c)(1), exclusion is "automatic and mandatory." *Karum Holdings LLC v. Lowe's Cos.*, 895 F.3d 944, 951 (7th Cir. 2018).

Even if the Court were to consider Singer's new analysis, however, it inexplicably finds that students who paid *nothing* for school still experienced the *same overcharge* as the other students in his data set. ECF No. 785-2, Singer Decl. ¶3. Reporting impact for students who received full rides finds injury where there simply can be none. Along with the fact that these students were, according to Singer, overcharged in the exact same amount as those who paid something, that conclusively demonstrates the model is rigged to show a uniform overcharge.

C.   Singer's Arbitrary Data Omissions Demonstrate Unreliability

Singer's regression excluded data from 568 Group members, Mot. 8-9; arbitrarily omitted data from the University of Chicago ("Chicago") because including it precludes plaintiff's desired result, *id.* 9-10; and included incomplete and unreliable 2023-2024 and 2024-2025 academic-year data, *id.* 11-12. The significant effect of those choices on Singer's opinions demonstrates the unreliability of his entire model. "[E]conometric results typically should not change materially with minor changes to the data." Mot. 10 (quoting American Bar Association, *Proving Antitrust Damages: Legal and Economic Issues* (2017), § II.6.A.). Singer's results materially change when including data he excluded (like post-2015 Chicago data) or excluding data he included (like later academic-year data). Mot. 10-11. As a result, his regression fails standard sensitivity tests, indicating the model itself (not just his data choices) is unreliable. *See, e.g.*, *EEOC v. DHL Express (USA), Inc.*, 2016 WL 5796890, at *7 (N.D. Ill. Sept. 30, 2016) ("[S]ensitivity analysis is a well-accepted method of determining the reliability of a regression model."); Hill Surreb. §§ 6.2, 6.3, App'x B.3. There is no reason why a change in one school's data for a sliver of the alleged class period would so dramatically impact the financial aid offered by *other schools* over the *life* of the

alleged conspiracy. The only explanation for this, like so many of his other errors, is that his regression was not designed to reliably estimate overcharges.

These defects are thus not, as plaintiffs claim, simply grist for cross-examination. Opp. 18. A regression model can reliably "estimate an average overcharge" *only if* "the regression analysis is based on a rigorous application of economic theory" to the facts of the case. *In re Dealer Mgmt. Sys. Antitrust Litig.*, 2024 WL3509668, at *15 (N.D. Ill. July 22, 2024); *Kleen Prods. LLC v. Int'l Paper*, 306 F.R.D 585, 602 (N.D. Ill 2015) (a court "cannot simply accept" an expert's opinions because he "appears to do a multiple regression analysis"). When an expert fails to meet that standard, including by omitting "relevant and usable data" for arbitrary reasons, plaintiffs concede exclusion is required. Opp. 21 n.43 (citing *Zenith Elecs. Corp. v. WH-TV Broad. Corp.*, 395 F.3d 416 (7th Cir. 2005)). That is the necessary result here.

First, plaintiffs cannot justify Singer's arbitrary exclusion of Chicago's post-2015 data, a "single adjustment" which results in a "70 percent increase in the conduct coefficient." Ex. 7, Singer Reb. ¶113. The opposition simply repeats Singer's speculation "that the post-2015 data 'mismeasured' the prices" because an inexplicable jump in "EIP" is "inconsistent with publicly available pricing data." Opp. 21. But Singer offers no reason why the post-2015 data, rather than the pre-2015 data, includes "mismeasured" prices other than his desire to "give[] the model an opportunity to find an effect" (i.e., it was necessary to produce the desired result). Singer Tr. 127:13-130:2; 130:18-132:19. Plaintiffs further assert that Singer was justified in dropping the data because he could not "isolate institutional need-based grant aid" in the structured data. Opp. 21. But that same problem did not stop Singer from using Rice's data. As he conceded, "I cannot reliably separate Rice's institutional merit-based gift aid from their institutional need based gift aid, so I treat all institutional gift aid as being institutional need based grant aid." Singer Am. Rep.

¶246 n.341. Such selective application of rules indicates unreliable, outcome-driven analysis.

Second, Singer conceded that "price effects" are "most reliably measured" by considering all schools in the 568 Group, Singer Reb. ¶75, but did not realize the Group included non-defendants, Singer Tr. 33:6-34:6. His regression therefore excludes non-defendant member data, rendering it unreliable under his own professed standards. Mot. 5-6. Plaintiffs attempt to defend that omission by claiming that "the available [] data were incomplete in an important way" for those additional schools because it "covered only 2009-2022, with no information before or after the Group's existence, making a before-after regression impossible." Opp. 20-21. But again, Singer himself has asserted that his model draws its strength (so far as it goes) from assessing *all* available data, including "both *before and after* the start of the Challenged Conduct, as well as *across* Defendant groups that participated and did not participate in the Challenged Conduct during the same years." Singer Reb. ¶81. Because Singer compares data from institutions participating in the challenged conduct with institutions not participating in the challenged conduct in the same year, his methodology does *not* require data from each non-defendant before and after the challenged conduct. That contradicts plaintiffs' argument that Singer was justified in not using relevant and reliable data because that data covers only the 2009-2022 academic years. Opp. 21.

Third, plaintiffs cannot show that including incomplete and unreliable 2023-2024 and 2024-2025 data was methodologically sound. This data is facially unreliable. For example, the 2024-2025 data includes only four defendants. Hill Reb. ¶225. Even that data is incomplete, containing, for example, just a single student from Penn. *Id.* Plaintiffs try to justify that decision by explaining the data is "important because they reflect a 'clean' period, and thus form part of Dr. Singer's benchmark against which the model compares cartel period pricing." Opp. 21-22. But needing data to show the desired effect is no justification. Mot. 11-12. Put differently,

reliability turns on having "sufficient data to employ the [chosen] methodology." *Manpower, Inc. v. Ins. Co. of Pa.*, 732 F.3d 796, 808 (7th Cir. 2013). Singer concedes he did not.

The effect of these choices is staggering. Without them, *none* of Singer's models produces a statistically significant overcharge and some show an *under*charge. Hill Surreb. Fig. 8.

D. Singer's Model Unreliably Imposes Common Impact

Singer's regression uses a single variable for the challenged conduct despite that conduct concededly varying over time and between schools. Mot. 12-15. That means Singer's model *cannot* determine whether there were uniform overcharges for proposed class members that attended different schools at different times, forcing a finding of common impact. *Id.* Plaintiffs principally respond that this regression is only part one of a two-step proof, and step two (which includes his price structure and "in-sample prediction" analyses) can remedy the first step's flaws. Opp. 10, 13. But plaintiffs are wrong about both steps. The regression in step one and "in-sample prediction" analysis in step two are both independently unreliable. Mot. 12-19. Even if that were not the case, Singer conceded that the steps of his analysis cannot be separated. *See, e.g.*, Singer Am. Rep. ¶255 ("In-sample prediction … uses the output of my regression analyses"); *id.* ¶254; Singer Reb. ¶224. And "[i]f any step in the expert's methodology or analysis is unreliable, the whole testimony based on that analysis is inadmissible." *See In re Proton-Pump Inhibitor Prods. Liab. Litig.*, 2022 WL 18999830, at *5 (D.N.J. July 5, 2022).[3]

1. Singer's Use Of A Single Variable Regression Is Unreliable

Plaintiffs assert that Singer "establishes a generalized effect across Defendants, time, and Class members from the [challenged conduct] through his impact regression." Opp. 10; *see also id.* 8, 13. But saying so does not make it so. As defendants explained, his single variable regression

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[3] Singer's price structure analysis depends on his regression and must be excluded. Singer Am. Rep. ¶262.

cannot *establish* a "generalized effect" from the challenged conduct because it *compels* one by assuming uniformity in conduct where none exists. Mot. 12-15. That assumption may be plausible in *some* price-fixing cases, but it is not here. Opp. to Class Cert. at 31-32.[4]

This case is nothing like a typical price-fixing case in which average overcharge regression models finding generalized effects have been accepted. Courts reject models like Singer's where the challenged conduct varies by defendant and over time. Consider plaintiffs' reliance on *In re Disposable Contact Lens Antitrust Litigation*, where the court accepted that "'use of averages is appropriate' because the contact lens market 'is a national market without significant price discrimination,'" 329 F.R.D 336, 378 (M.D. Fl. 2018). Unlike purchasers of contact lenses who might repeatedly buy from many different manufacturers over their lifetime, students enrolled in just one school and did not engage in repeat transactions with defendants; nor did defendants set a single price for a single product, but rather each offered different products at different prices for each student. *See* Opp. to Class Cert. at 31-32, 55-58. These facts render an average overcharge inappropriate. *See N. Brevard Cty. Hosp. Dist. v. C.R. Bard, Inc.*, 710 F. Supp. 3d 1090, 1111 (D. Utah 2023) (average overcharge model inadequate where market did not have "standardized pricing scheme" and "there is no reason to assume" the challenged conduct "affects purchasers equally and in the same way"); *In re Pre-Filled Propane Tank Antitrust Litig.*, 2021 WL 5632089 at *9 (W.D. Mo. Nov. 9, 2021) (use of average "conceals the significant and undisputed variation in pricing that exists among [d]efendant's retail customers" and is thus "insufficient").

Plaintiffs attempt to shift the burden to defendants, lamenting that "[d]efendants' attempts to specify regressions … are deeply flawed" because they use "small datasets." Opp. 12. But it is not defendants' burden to show no common impact; plaintiffs must show that their expert's method

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[4] Plaintiffs' argument that Singer "tests" whether "the overcharge was identical … as between all 17 defendant schools" (Opp. 11) relies on Singer's unreliable in-sample prediction, Singer Am. Rep. tbl 13.

for assessing impact through common evidence is reliable. *Lewis*, 561 F.3d at 705. Anyway, plaintiffs misunderstand (or misrepresent) the Stiroh regressions that they criticize as constituting separate models with separate datasets. Opp. 12-13. Stiroh used the exact same dataset as Singer. Ex. 8, Stiroh Tr. 260:12-262:1; Ex. 9, Stiroh Reb. ¶¶175-177, Ex. 10, Stiroh Surreb. ¶11.

2. Singer's In-Sample Prediction Analysis Is Fundamentally Flawed

Singer's in-sample prediction analysis—his step two—cannot get him out of this bind. Plaintiffs can only respond to defendants' arguments by asserting that in-sample prediction analysis *can be* reliable, Opp. 13. That may (or may not) be true, but it offers Singer no help.

First, plaintiffs misunderstand defendants' argument (Mot. 16-17) that Singer's in-sample prediction analysis is unreliable because his regression cannot accurately estimate "EIPs." Opp. 16-17. As explained, Singer's in-sample prediction analysis results in wild fluctuations in the alleged overcharges for many students from year to year. *Id.* Singer's only explanation for those variations at the individual student level was that his "model just could not have predicted" students' *real* "EIPs." Singer Tr. 272:15-17; *see also id.* 270:9-271:10 ("The regression can't explain why it was so low."). If the underlying regression cannot accurately estimate real-world "EIPs" for students, there is no reason to believe it can estimate but-for world "EIPs" for the same students, as is needed for Singer's in-sample prediction analysis to be reliable. Mot. 16-17.

Plaintiffs respond that it is "inherent to regression models that some of the actual prices paid are higher than the model's predicted but-for price." Opp. 16-17. But the problem is not that some of the actual prices paid are higher than the predicted but-for price; the defect is that the model is unreliable at predicting "EIP" in the first place. For a methodology that "compute[s] the proportion of Class Members that sustained antitrust injury as a result of the Challenged Conduct" by "us[ing] the output of [Singer's] regression analyses to compare the Effective Institutional Price that students paid to what they would have paid," that is dispositive. Singer Am. Rep. ¶¶255-256.

Second, defendants showed that Singer's in-sample prediction analysis implausibly finds that 85% of class members were harmed by an amount equivalent to *exactly* the average overcharge multiplied by the number of observations for that class member. Mot. 17-19. 85% of students is not just "some students in the data." Opp. 14. Plaintiffs agree this implausible result is inherent to Singer's in-sample prediction analysis but dismiss it as stemming from "technical statistical reasons." *Id.* But when evaluating the reliability of a complex statistical model, "technical statistical reasons" are the whole ballgame. Plaintiffs try to justify the implausible result by claiming "non-straddlers"—students whose school participated in the challenged conduct the entire time they were enrolled—"are the most likely to be harmed." Opp. 15. Why this is so is never said. And even if that had been Singer's rationale—plaintiffs cite nothing from him on this point—it would not matter. Regardless which students were more or less likely to be harmed, Singer purports to show they were *always* harmed by *exactly* a multiple of his average overcharge. Neither result is plausible and both demonstrate the inherent unreliability of Singer's methodology.

Finally, plaintiffs argue that Singer can instead opine that all or nearly all class members were harmed by "extrapolat[ing]" from in-sample prediction analyses of two smaller samples of students. Opp. 15. The first extrapolates from an analysis of all straddlers to the non-straddlers. *Id*. The second extrapolates from an even narrower set of "Yale straddler[s]," a group of students that received financial aid both before and after Yale left the 568 Group in 2008. Ex. 11, Singer Sur-surreb. ¶¶70-72. Plaintiffs contend that, given the high rate of impact among these smaller straddler populations, Singer can "extrapolate … to the Class as a whole" because courts in other cases have permitted experts to apply conclusions from a sample to the larger class. Opp. 15.

The analysis of these small straddler populations, however, still uses the same unreliable in-sample prediction analysis. Analyzing a smaller subset of students does not make his model any

better at predicting "EIPs." *Supra*, at 10. Further undermining the reliability of these alternatives, the straddler populations are not—as they must be—representative of the class (as 85% of class members are non-straddlers). Extrapolating from a non-representative sample is fundamentally unreliable. *EEOC v. Kaplan Higher Educ. Corp.*, 748 F.3d 749, 754 (6th Cir. 2014).

There is no statistically sound basis for extrapolation here. Merely getting results that do not support your desired conclusion is not an accepted ground for extrapolation. The cases plaintiffs rely upon to justify extrapolation, by contrast, all involve situations where that method is necessary because more complete data is unavailable. Opp. 15 n.29; *see also In re Dealer Mgmt.*, 581 F. Supp. 3d 1029, 1089 (N.D. Ill. 2022) ("Stroz used *all* of the data available to him."); *Tyson Foods, Inc. v. Bouaphakeo*, 577 U.S. 442, 455-56 (2016) ("In many cases, a *representative* sample is the only practicable means to *collect and present* relevant data establishing a defendant's liability" and doing so is "permissible" when necessary "to fill an evidentiary gap created by the employer's failure to keep adequate records." (emphasis added)). That analyzing the full set of class observations yields an implausible result for 85% of the class means that the method itself is unreliable, not that Singer may use a smaller, less representative sample to rig different results.

E.   Singer Applied No Reliable Methodology To Arrive At His Market Definition

Plaintiffs offer two defenses of Singer's proposed market of "Elite Private Universities whose undergraduate programs consistently ranked in the USNWR Top 25 during the Class Period," Singer Am. Rep. ¶72. Neither is persuasive, and both rely on labels rather than substance.

1.   Singer Did Not Perform A Hypothetical Monopolist Test

Plaintiffs first respond that defendants' motion ignores Singer's hypothetical monopolist test ("HMT"). Opp. 24. But that test is just Singer's regression dressed differently, *id.*, *see also* Singer Am. Rep. ¶64, and defendants have explained at length why that regression is unreliable, Mot. 5-19. In any case, calling something a hypothetical monopolist test does not make it one.

HMTs help identify the relevant market by "identify[ing] a set of products that are reasonably interchangeable with a product sold." Ex. 12, DOJ & FTC, *Horizontal Merger Guidelines* § 4.1.1 (2010). Generally, HMTs do so by analyzing consumer reactions to a "small but significant and non-transitory increase in price ('SSNIP')" on the product. *Id.* Thus, a properly conducted HMT assesses whether "a significant number of customers would respond to a SSNIP by purchasing substitute products" outside of the proposed market. *Theme Promotions, Inc. v. News Am. Mktg. FSI*, 546 F.3d 991, 1002 (9th Cir. 2008). If yes, the proposed market is too narrow. If no, that supports the proposed market definition. But Singer does not analyze how consumers reacted to the supracompetitive price increase he purportedly finds, and neither Singer nor plaintiffs cite any authority that "ask[ing] whether a hypothetical monopoly provider of Elite Private University services … could raise prices profitably over competitive levels" is itself an HMT. Singer Am. Rep. ¶79; Opp. 24. Even if Singer's regression reliably showed defendants increased prices above but-for prices (it does not), that says nothing about the market definition because it cannot show how consumers reacted to that price increase. Singer's regression is not an HMT.

2. *Ipse Dixit* Is Not Reliable Market Analysis

Next, plaintiffs argue that defendants are "improperly focused on Dr. Singer's *conclusions*" rather than his methods. Opp. 24. That is wrong. Defendants explained that Singer's *method* is just *ipse dixit*. Mot. 23-28. Unless by "method" plaintiffs are referring to Singer's citation of economic literature that contradicts his definition (Mot. 23-24), Singer's selective read of record evidence to draw conclusions about schools' perceptions (Mot. 24), Singer's decision to ignore top liberal arts colleges only when they are inconvenient to the desired conclusion (Mot. 26), Singer's pronouncement (but not analysis) of price distinctiveness (Mot. 25-26), Singer's unexplained "empirical" peer analysis (Mot. 27), and his disregard for the results of his own student revealed preference analysis (Mot. 27-28). This cannot support a market.

Consider plaintiffs' justification of Singer's "peer analysis." First, they try to reduce defendants' criticism of his "ratio analysis" to the fact that "three schools (Harvard, Stanford, and MIT) happen to have ratios suggesting that they are lower quality than certain lower-ranked schools." Opp. 26. But defendants' criticism is that Singer does not explain his "methodology"— namely, why a lower "peer/reverse peer" ratio indicates higher quality. Mot. 27. Singer's only explanation is to point to Harvard's low ratio. Singer Am. Rep. ¶89. But simply asserting a lower ratio indicates higher quality based on one example (especially when MIT's ratio is higher than Emory's) is just *ipse dixit*—not a methodology.

Plaintiffs also argue that defendants "do not critique the second part of Dr. Singer's peer analysis, where he finds that 51 percent of Elites [were] listed as peers by other Elites, compared to only 0.6 percent of schools outside the relevant market." Opp. 26. That is meaningless. "Schools outside the relevant market" include *all 373 other universities* in Singer's data—so it is no surprise a very small fraction of those schools are listed as peers by Singer's Elites. *See* Singer Am. Rep. ¶86. Unsurprisingly that remains true for the expanded market definitions. *Id.* tbl. 4.

Plaintiffs' attempt to salvage Singer's revealed preference analysis is similarly deficient. Defendants did not assert that "if any non-Elite school scores a revealed preference metric greater than any Elite, then that school should be added to the market." Opp. 26. Rather, Singer's revealed preference analysis shows students who were cross-admitted preferred many schools *not* in his market over many in his market. Mot. 27-28. That is not "a handful of anomalies," Opp. 26, or just "some competition," Opp. 25. Next plaintiffs argue that the point of the revealed preference analysis is instead to see if "adding an entire category of schools outside of the market causes the *combined* authority of schools in the relevant market to change materially." Opp. 26. Here "the impact of adding" more schools "is not substantial" because their "total authority … is 0.123."

Singer Am. Rep. ¶106. But that is more total authority than the bottom 10 schools in Singer's own

market definition (0.087, Singer Am. Rep. tbl 6). By Singer's own reasoning these schools are not

in the relevant market either, because they offer only "limited competition" not "sufficiently high

for a price rise to cause a fall in net assets (i.e. 'profits')." Singer Reb. ¶22. Yet Singer's proposed

market definition does not exclude those schools (likely because they include defendants).

F.   **Singer's Recitation Of The Record And State Of Mind Opinions Are Inadmissible**

Singer spent dozens of pages describing and summarizing record evidence with no

economic analysis. Mot. 20-21. Plaintiffs' only defense—calling that recitation of the evidence an

"evaluation … through an economic lens"—does not make it so, Opp. 27. Singer restates record

evidence noting how defendants "describe[] themselves," Singer Am. Rep. ¶157, "summariz[ing]

… exemplary evidence of each Defendant's participation in the Challenged Conduct," *id.* ¶¶287-

378, identifying "documents [that] reflect" what the "schools agreed [to]," *id.* ¶147, describing

how "Defendants continued to work with and through the College Board," *id.* ¶159, and listing the

information and notebooks shared through COFHE, *id.* ¶¶165-168.

As to Singer's inadmissible state-of-mind opinions, plaintiffs can only mischaracterize his

testimony as "evaluat[ing] evidence of Defendants' economic incentives and perceptions." Opp.

28. But defendants identified numerous paragraphs where Singer opines on a defendant's state of

mind, Mot. 21-22, and plaintiffs do not explain how any of those statements instead evaluate

"economic incentives and perceptions," Opp. 28. That is not permissible just because this case

does not include "fraud claims in which Defendants' state of mind is an element of the claim."

Opp. 29 n.74. Experts cannot opine about defendants' state of mind if doing so falls outside of

their expertise. *See Ploss v. Kraft Foods Grp., Inc.*, 637 F. Supp. 3d 561, 575-76 (N.D. Ill. 2022)

(excluding "inadmissible testimony about Kraft's state of mind" because expert "is venturing

outside his area of expertise" in commodities and antitrust case). Singer may be a better mind-

reader than he is an economist, but it is not the source of his claimed expertise.

G. Singer Does Not Offer A Reliable Opinion On "Packaging"

Singer's *ipse dixit* that the challenged conduct affected packaging is unreliable because it is based solely on his reading of cherry-picked evidence and belied by the record. Mot. 20-21. Plaintiffs primarily respond by suggesting that Singer's regressions showed a difference in "EIP" overcharge and "Expected Family Contribution" inflation that could only be explained through the challenged conduct having also affected packaging, providing a quantitative counterpart to Singer's qualitative *ipse dixit*. Opp. 29. The other, more probable explanation is that Singer's model is unreliable and his regressions cannot support his opinions. *Supra*, at 2-12; Mot. 15.

That leaves the qualitative "evidence." After years of discovery, plaintiffs and Singer have found just two putative examples of an agreement on packaging: (1) a single document from Emory; and (2) the fact that Yale, Rice, Chicago, Emory, and Brown adopted no-loan policies after leaving the 568 Group. *See* Opp. 30. But Emory and Brown adopted those policies *years* after leaving, *see* Singer Reb. ¶65, and Columbia, Penn, Vanderbilt, Northwestern, and MIT all adopted no-loan policies while they were still 568 Group members, Opp. to Class Cert. at 30. Accordingly, "no reasonable person could say" that the 568 Group *prohibited* adopting such policies. Singer Tr. 59:24-60:20. That plaintiffs need him to say so anyway is not a reliable basis for his opinion.

II. Plaintiffs' Objections Cannot Save Bulman's Opinions and Testimony

Nothing in plaintiffs' opposition saves Bulman's three opinions.[5]

Opinion 2: Plaintiffs evade responding to legitimate criticisms of Bulman's regressions by attacking strawmen and raising irrelevant issues about data and standard errors. They contend he

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[5] Plaintiffs say Bulman is qualified as an expert in both "economics and university endowments" and claim defendants do not contest this. *See* Opp. 1, 5. But as defendants have explained, Bulman has not been offered—and is not qualified—to serve as an industry expert on university endowments. *See* Mot. 32.

properly studied "the direct effect of cumulative returns" because "excess returns might affect 'student aid' through mechanisms *other than endowment levels*." Opp. 30-31. This argument disregards sound economics and contradicts Bulman's own work. In his 2022 paper, Bulman used "endowment returns" as an instrumental variable to measure the relationship between endowment levels and financial aid. For endowment returns to be a proper instrumental variable, it must be true that endowment returns *cannot* affect financial aid spending other than through endowment levels. *See* Ex. 13, Wooldridge, *Introductory Econometrics: A Modern Approach*, 507-508 (4th ed. 2009). Bulman's academic work thus assumes the opposite of his opinions here. And it is clear why he did not use the 2022 paper's (correct) methodology here: using it, the results supporting his proffered opinions evaporate. Mot. 30. These are not "disputes over regression specifications," Opp. 31—they concern the "reliability of [Bulman's] methodology—the framework—of [his] analysis." *Manpower, Inc.*, 732 F.3d at 808.[6]

Opinions 1 and 3: Bulman's other opinions—that defendants saw "substantial" endowment growth and could have spent more on financial aid—are: (1) irrelevant, (2) unduly prejudicial, and (3) not the product of specialized knowledge. *See* Mot. 31-32. Plaintiffs do not contest the first two arguments. *Cf.* Opp. 32-33. Bulman's opinions should be excluded for these reasons alone. *See Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 591, 595 (1993).[7]

Instead, plaintiffs contest whether Bulman's opinions are based on specialized knowledge.

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[6] Plaintiffs' other arguments focus on critiques defendants did not emphasize—like the spending rate in Bulman's model—or never raised—like the appropriate standard errors. Opp. 31-32. Plaintiffs also claim that Bulman could not use the approach from his academic work because he used different data. Opp. 30. That objection is immaterial. Since Bulman is studying different schools, he is inevitably using different data. But the underlying focus is the same: the interplay between endowments and financial aid spending.

[7] Even if Bulman's third opinion is not critical for ruling on class certification, Opp. 33, defendants have moved to exclude it for all purposes. Mot. 3, 28-32. And while plaintiffs suggest that Bulman's third opinion will be relevant to rebut a resource constraint argument, Bulman offered this opinion in his opening report. Ex. 14, Bulman Rep. ¶9(c). He was not rebutting anything.

But Bulman admits that his first opinion simply "compiled data for the endowment levels and …

adjusted them for inflation." Ex. 15, Bulman Tr. 77:16-19. As to Bulman's third opinion, while

plaintiffs assert that Bulman has "studied endowments and universities and understands the

constraints of the system," Opp. 33, he has no experience managing endowments, has written only

one relevant paper, and disregards the limits, including legal ones, on defendants' financial aid

spending. *See* Mot. 29, 32. Unlike the expert whose report plaintiffs cite, Opp. 33, Bulman does

not have the requisite background to prepare him to "answer the questions asked" on that subject.

Schuring v. Cottrell, Inc., 244 F. Supp. 3d 721, 729 (N.D. Ill. 2017). A background in economics

does not mean Bulman can offer expert testimony on any topic that involves math.

III.   Mora's Opinions Must Be Excluded

Plaintiffs contend "Defendants' argument for excluding Ms. Mora's testimony is that she

did not academically study Defendants' finances." Opp. 4. She did not, but plaintiffs miss the

point: Mora is a glorified fact witness masquerading as an expert, who made no effort to buttress

her scant expertise with analysis of the record, and whose opinions are irrelevant.

How Defendants Are "Akin" to For-Profit Businesses: Plaintiffs attempt to elide Mora's

testimony, Opp. 33-34, but her own explanations clarified that her opinion has no substance. Mora

believes defendants are "akin" to some complex for-profits in some ways, but are *also different*

from many complex for-profits in significant ways. *See, e.g.*, Ex. 16, Mora Tr. 90:10-20. Mora

also opines that other nonprofits and non-defendants—like the University of Michigan and

University of California, which plaintiffs simultaneously claim are too dissimilar to defendants to

be in the relevant market—bear the same similarities to complex for-profits she observes in

defendants. *See, e.g.*, *id.* 92:10-93:17, 96:3-22. Mora's opinion, under oath, is that defendants are

similar to *and different from* some for-profits, and are also different from *and similar to* non-

defendant nonprofits. Anyone can say this about anything. To be helpful to a jury, Mora needs to

be able to explain why the similarities she observes *are meaningful*. She cannot. *E.g.*, *id.* 69:5-8.

Plaintiffs' claim that Mora "reviewed [d]efendants' operational data," Opp. 34, does not solve the problem. That "data" comprised the 2022 annual report and 2021/2022 Form 990 for each defendant and the 2022 endowment report(s) for 7 defendants. Ex. 17, Mora Rep. App'x D. None provides detailed information about each school's organization even for the year it was published, much less for the 20-year class period. *See, e.g.*, Ex. 18, Notre Dame Annual Rep. 2022 (providing little information about structure or operations); Ex. 19, Brown Endowment Rep. 2022 (same); Ex. 20, Notre Dame Form 990 (same). Mora admitted these materials vary in specificity, with some providing little detail about the topics on which she opines. Mora Tr. 128:23-131:14. Simply put, it would be impossible even for a qualified expert (which Mora is not) to render the opinions Mora summarily offers about all 17 defendants based on the 12 record documents, 6 deposition transcripts, and handful of public reports and tax filings Mora reviewed. "[T]here is simply too great an analytical gap between the data and the opinion proffered." *General Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997); *Campbell v. Nat'l R.R. Passenger Corp.*, 311 F. Supp. 3d 281, 299 (D.D.C. 2018) (excluding expert who "did not review information critical to [his] opinions").

The Purposes of Financial Aid: Plaintiffs invent an opinion Mora disclaimed. Mora said she was *not* opining that "maintaining excellence and prestige" is the sole purpose of institutional financial aid; rather, she agreed that such aid serves altruistic purposes, and that enhanced excellence and prestige is just a "consequence" of providing aid. Mora Tr. 222:1-9. This does nothing to show *per se* analysis applies. Opp. 34. As the district court in *Choh v. Brown University* recently explained in addressing *United States v. Brown University*, 5 F.3d 658 (3d Cir. 1993):

> *Brown* does not support a conclusion that where plaintiffs allege that defendants do not have purely altruistic motives and have a revenue maximizing purpose, i.e. the defendant is operating a commercial enterprise, the conduct of the defendants should not be judged under the rule of reason. As the defendants note, correctly:

the NCAA has repeatedly been called 'commercial,' yet the Supreme Court and lower courts consistently apply the rule of reason to evaluate its rules.

2024 WL 4465476, at *7 (D. Conn. Oct. 10, 2024) (cleaned up).

Plaintiffs' other explanations for relevance are no more compelling. That schools enjoy positive consequences from providing institutional aid does not concern defendants' "financial flexibility" or how they would have "competed" in the but-for world. Opp. 34-35. And arguing that Mora's opinions are grounded in "personal observations" concerning "*Harvard's* awarding of institutional financial aid," Opp. 35 (emphasis added), is a concession: Mora's opinions are based on "personal observations" from seventeen years ago at a non-defendant university that was never a member of the 568 Group. Her vantage point for these "observations" was never in a financial aid office or in a role that dealt with financial aid policy. Mot. 34-35. This opinion is grounded in "anecdotal" evidence from vaguely remembered fragments of conversations with unspecified others, Mora Tr. 237:5-238:1, which does not position Mora to offer reliable opinions.

Budgets/Endowments and Competition: Mora once sat on a board that managed Harvard's endowments. Opp. 35. But knowing something about a *non-defendant's* practices in *2008* does not qualify Mora to opine on what *each defendant* did or how they behaved during the *twenty-year* class period. Mora concededly did not learn any facts about the availability, size, or flexibility of any revenue stream for any defendant or the restrictions on any of their endowed funds. Mora Tr. 161:10-163:11, 164:15-165:4. The "operational data" plaintiffs claim she reviewed does not shed light on any of this, and would not equip even a qualified expert to opine on how defendants' endowments could or should have been managed. *See supra*, at 19.

CONCLUSION

The Court should exclude Singer's, Bulman's, and Mora's opinions and testimony in full.

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CERTIFICATE OF SERVICE

I hereby certify that on this 28th day of February, 2025, I electronically transmitted the

public version of the foregoing document to the Clerk's Office using the CM/ECF System and

caused the version of the foregoing document filed under seal to be transmitted to counsel of record

by email.

Dated: February 28, 2025   */s/ Britt M. Miller*
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